

WHAT IS CLAIMED IS:

Sub A1

1. A system for inter-thread communications, comprising:
  - at least one thread from a first group of threads;
  - a first buffer for buffering a request from the at least one thread from the
  - 5 first group;
  - at least one thread from a second group of threads for performing an
  - operation according to the request retrieved from the first buffer; and
  - a second buffer for buffering a response with respect to the request, the
  - response being generated by the at least one thread from the second group, the
  - 10 response being retrieved by the at least one thread from the first group.
2. The system according to claim 1, wherein the first group of threads
- includes a user interface thread.
- 15 3. The system according to claim 1, wherein the second group of threads
- includes a worker thread.
4. The system according to claim 1, wherein the first buffer comprises a
- plurality of buffer cells.
- 20 5. The system according to claim 1, wherein the second buffer comprises a
- plurality of buffer cells.
6. A method for inter-thread communications, comprising:

5 sending, by a thread from a first group of threads, a request to a first  
buffer;

retrieving, by a thread from a second group of threads, the request from the  
first buffer according to a predetermined criterion;

5 processing the request, retrieved by the retrieving;

sending, by the thread from the second group, a response with respect to  
the request to a second buffer after the processing; and

receiving, by a thread from the first group, the response from the second  
buffer according to a second predetermined criterion.

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7. The method according to claim 6, wherein the first group includes a  
user interface thread; and

the second group includes a worker thread.

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8. The method according to claim 6, wherein retrieving the request by a  
thread from the second group according to a predetermined criterion includes  
retrieving according to whether the thread from the second group can perform the  
operation requested by the request.

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9. The method according to claim 6, wherein the receiving the response  
by a thread from the first group of thread according to a second predetermined  
criterion includes receiving according to whether the response is addressed to the  
thread from the first group of threads.

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10. A method of inter-thread communication comprising:

generating, by a thread from a first group of threads, a request to a thread  
from a second group of threads;

identifying an available buffer cell in a first buffer; and

packing the request in the available buffer cell of the first buffer.

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11. The method according to claim 10, further comprising:

receiving a response with respect to the request, generated by the thread  
from the second group, from a second buffer after the request being packed by the  
packing.

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12. A method of inter-communication, comprising:

receiving, by a thread from a second group of threads, a request, sent by a  
thread from a first group of threads, from a first buffer; and processing the request.

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13. The method according to claim 12, further comprising:

generating a response with respect to the request after the processing;

identifying an available buffer cell in a second buffer; and

packing the response in the available buffer cell in the second buffer.

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14. A computer-readable medium having program code stored therein for  
causing, when executed, inter-thread communications to occur comprising:

sending, by a thread from a first group of threads, a request to a first  
buffer;

25 retrieving, by a thread from a second group of threads, the request from the  
first buffer according to a predetermined criterion;

processing the request, retrieved by the retrieving;  
sending, by the thread from the second group, a response with respect to  
the request to a second buffer after the processing; and  
receiving, by a thread from the first group of threads, the response from  
5 the second buffer according to a second predetermined criterion.

15. The medium according to claim 14, wherein the first group of  
threads includes a user interface thread; and  
the second group of threads includes a worker thread.

16. The medium according to claim 14, wherein retrieving the request by a  
thread from the second group of threads according to a predetermined criterion  
includes retrieving according to whether the thread from the second group can  
perform the operation requested by the request.

17. The medium according to claim 14, wherein the receiving the  
response by a thread from the first group of threads according to a second  
predetermined criterion includes receiving according to whether the response is  
addressed to the thread from the first group of threads.

18. A computer-readable medium having program code stored thereon  
which, when executed, causes the occurrence of inter-thread communication, the  
program comprising:

generating, by a thread from a first group of threads, a request to a thread  
from a second group of threads;

identifying an available buffer cell in a first buffer; and

packing the request in the available buffer cell of the first buffer.

19. The medium according to claim 18, wherein the program code when executed further causes:

5 receiving a response with respect to the request, generated by the thread from the second group of threads, from a second buffer after the request being packed by the packing.

20. A computer-readable medium encoded with a program of a thread for  
10 inter-communication, the program, when executed, causing:

receiving, by a thread from a second group of threads, a request, sent by a thread from a first group of threads, from a first buffer; and  
processing the request.

15 21. The medium according to claim 20, the program further causing:  
generating a response with respect to the request after the processing;  
identifying an available buffer cell in a second buffer; and  
packing the response in the available buffer cell in the second buffer.